XSITE® ROVER -SMART ANTENNA
TECHNICAL INFORMATION

GNSS Receiver Specifications

Receiver Type:	Multi-Frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas L-band
Signals Received:	GPS L1CA/L1P/L1C/L2P/L2C/L5
	GLONASS G1/G2/G3, P1/P2
	BeiDou B1i/B2i/B3i/B1OC/B2A/B2B/ ACEBOC
	GALILEO E1BC/E5a/E5b/E6BC/ALTBOC
	QZSS L1CA/L2C/L5/L1C/LEX
	IRNSS L5
	Atlas
Channels:	800+
RTK Formats:	RTCM2.1, RTCM2.3, RTCM3.0, RTCM3.1, RTCM3.2 including MSM
Recording Intervals:	Selectable from 1, 2, 4, 5, 10 Hz (20 Hz or 50 Hz optional)

Accuracy

Positioning:	RMS (67%)	2DRMS (95%)
Autonomous, no SA:[1]	1.2 m	2.4 m
SBAS: [1]	0.3 m	0.6 m
RTK: [1,2]	8 mm + 1 ppm	15 mm + 2 ppm
Static Performance:[1]	2.5 mm + 1 ppm	5 mm + 1 ppm
Initialization Time:	< 10 s	
Tilt Compensation (Within 30°)	2 cm (with 1.8 m pole)	

L-Band Receiver Specifications:

Receiver Type:	Single Channel
Frequency Range:	1525 to 1560 MHz
Sensitivity:	-130 dBm
Channel Spacing:	5.0 kHz
Satellite Selection:	Manual and Automatic
Reacquisition Time:	15 seconds (typical)

Communications

Bluetooth:	Bluetooth 2.1+EDR / 4.0 LE
Wi-Fi:	802.11 b/g
Network:	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28
	LTE TDD: B38/B39/B40/B41
	UMTS: B1/B2/B4/B5/B6/B8/B19
	GSM: B2/B3/B5/B8
Radio:	Frequency range: 410MHz ~ 470MHz and 902.4MHz ~ 928MHz
	Channel Spacing: 12.5 KHz / 25 KHz
	Protocol: TrimTalk 450S, PCC EOT, TrimMark III(19200)
WebUI:	To upgrade software, manage status and settings, data download, via smartphone, tablet or other electronic device, configure advanced radio settings

Connector Ports

TNC:	For connecting to UHF radio antenna
LEMO 5-pin:	For connecting to external power supply, external radio
LEMO 7-pin:	For serial port, USB
Card Slots:	For Micro SIM card and Micro SD card

Data & Storage

Storage Type:	8 GB internal, SD card up to 32 GB

Physical

Weight:	1.19 kg (1 battery), 1.30 kg (2 batteries)
Dimensions:	156 x 76 mm

Environmental

Operating Temperature:	-30°C ~ +65°C
Storage Temperature:	-40°C ~ +80°C
Protection:	IP67. Protected from temporary immersion to a depth of 1 m
Shock Resistance:	MIL-STD-810G, method 516.6. Designed to survive a 2 m pole drop on concrete floor. Designed to survive a 1 m free drop on hardwood floor
Humidity:	Up to 100%
Vibration:	MIL-STD-810G, method 514.6E-I
Inflammability:	UL recognized, 94HB Flame Class Rating (3) 1.49 mm
Chemical Resistance:	Cleaning agents, soapy water, industrial alcohol, water vapor, solar radiation (UV)

Electrical

Input Voltage:	9 to 28 V DC
Battery:	With removable dual battery, for single battery parameter: 7.2 V, 3400 mAh, 24.48 Wh
Working Time:	12 hours in Rover UHF mode (2 batteries)

User Interface

Button:	Switch receiver on/off, broadcast current operation mode and status
LEDs:	Power, Satellite, Data Link, Bluetooth
WebUI:	Supports software updates, receiver status and settings, and data downloads via smartphones, tablets, or other Wi-Fi capable devices.

1. Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity
2. Depends also on baseline length